Issues Under 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claims 1, 2, 6, 7, 10-14, 15-16, 18, 20-24 and 41-42 under 35 U.S.C. § 112, second paragraph. The Advisory Action of July 22, 2002 states that this rejection has been overcome.

Issues Under 35 U.S.C. § 112, First Paragraph

In the Advisory Action of July 22, 2002, the Examiner has maintained the rejections of claims 1, 2, 4, 6, 7, 10-14, 15-16, 18 and 20-24 under 35 U.S.C. § 112, first paragraph. Applicants respectfully traverse and maintain their position that the specification has adequate written description and provides sufficient enablement for one having ordinary skill in the art to make and use the present invention.

The Advisory Action states that "homologous recombination does not obviate the necessity for a structure/function correlation, as the claims require one to determine that the protein, of which the claimed DNA fragment encodes a portion, has to possess PPO activity" (page 2, "Continuation of 5." of the Advisory Action). Applicants respectfully note that independent claim 1 is directed to a method and that independent claim 15 is directed to a product. With regard to a claim directed to a DNA product, the Federal Circuit stated: "An adequate written description of a DNA requires more than a mere statement that it is part of the invention and reference to a

potential method for isolating it; what is required is a description of the DNA itself." See Fiers v. Revel, 984 F.2d 1164, 1170-1171, 25 USPQ2d 1601, 1606 (Fed. Cir. 1993). Applicants have described the claimed DNA fragment, including the hybridization conditions shown to have worked in the present invention. Thus, Applicants were in possession of the present invention at the time of filing the present application.

With regard to the issue of enablement, none of the previous Office Actions or the recent Advisory Action properly addresses the In re Wands factors. A proper analysis for enablement would consider all of the Wands factors, which include: (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. See In re Wands, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Thus, Applicants respectfully submit that the burden of proving enablement has not shifted to the Applicants because the Examiner has failed to provide a reasoned statement and acceptable evidence as to why the present specification provides inadequate enablement to one having ordinary skill in the pertinent art.

Also, in the Amendment and Reply After Final Under 37 C.F.R. § 1.116 filed July 5, 2002, Applicants sufficiently addressed each of

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the Wands factors and have shown that a proper weighing of the Wands factors would reside in Applicants' favor. The proper weighing of the Wands factors is true for all of the pending claims, including both independent claims 1 and 15.

Accordingly, Applicants respectfully submit that the specification of the present application does have adequate written description and provides sufficient enablement for one having ordinary skill in the art to make and use the present invention. Thus, Applicants respectfully request the Examiner to withdraw all rejections and allow the currently pending claims.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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